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REPLY OF THE UTILITY REFORM NETWORK

TO RESPONSES TO ALJ QUESTIONS CONCERNING DEMAND RESPONSE

IN 2018 AND BEYOND

TURN
THE UTILITY REFORM NETWORK

Lower bills. Livable planet.

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TABLE OF CONTENTS

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Pursuant to the Commission's Rules of Practice and Procedure and to the schedule set by ALJ Hymes in the May 20, 2016 "Administrative Law Judge's Ruling Requesting Responses to Additional Questions in Regard to 2018 And Beyond Demand Response Programs" ("ALJ Ruling"), as modified via an Email Ruling on July 11, 2016, The Utility Reform Network ("TURN") provides the following replies to the responses of certain parties. TURN had filed its responses to the ALJ's questions on July 1, 2016.

1. Summary

TURN's review of the pleadings submitted by different parties suggests that there was general agreement about several overarching issues concerning the future design of demand response, and TURN supports many of the points made by diverse parties, including the utilities, various demand response providers, and the California Independent System Operator ("CAISO").

TURN thus replies primarily to certain responses that appear to raise issues in dispute, or indicate uncertainty or confusion among parties. TURN's lack of response to particular parties, or on particular issues, should not be interpreted as signifying any agreement or dispute. Due to the large number of questions and certain overlapping issues, TURN organizes its replies by topic areas, and links these areas to the questions presented in the ALJ Ruling.

TURN recommends that in preparing any guidance for the utilities in advance of their filings for demand response activities and budgets for 2018 and beyond, the

Commission should hold additional workshops and/or require additional comments or briefing on the following key areas:

- The applicability of the Commission's Data Privacy Rules to the distribution of customer consumption data to demand response providers who have a contractual relationship with a utility, especially through a DRAM contract;
- The necessity for additional performance requirements and penalty provisions in the DRAM contract;
- The requirements and steps necessary to promote the use of demand response for local and flexible capacity;

Additionally, TURN provides some comments regarding various parties' interpretation of the Interim Report on demand response potential.

2. Specific Responses

2.1. Expectations, Goals, Metrics and Program Design (Category 1 and 2

Expectations and Program Design

Most parties agreed that demand response should meet "electrical system needs" (SCE), help customers "manage their energy consumption and costs," and provide various "grid needs" (P&GE, Joint DR Parties). The CAISO emphasized that DR must evolve from a use-limited product "into a flexible resource that assists in integrating significant amounts of renewable resources in the California grid."[1]

[1] CAISO, p. 2. [Any citation identifying only the name of the party and page number is referencing responses submitted on July 1, 2016, in this docket.]

While none of these characterizations is incorrect, the Commission should not be distracted by vague notions. When examined more closely, it is undeniable that the primary means by which demand response meets "grid needs" is by providing *capacity value*; and such value is achieved only if demand response load reductions are incorporated in long-term planning processes that result in authorizations for utility procurement of new conventional power plants. This fact is especially important to keep in mind when considering if and how the *frequency of dispatch* impacts the ability of demand response to provide any of these capacity products.

For example, while PG&E uses the term "grid needs" to discuss services provided by demand response, in its detailed response PG&E clarifies that grid needs really mean providing system, local or flexible capacity.[2] PG&E then goes on argue that providing these "grid needs" requires flexibility with respect to triggers and dispatch, so that "customers capable of more frequent dispatch [can] receive greater compensation," reflecting the varied opportunity costs of different customers.[3]

SCE, on the other hand, emphasizes that customer participation requires addressing the potential for "customer fatigue," and concludes that "the Commission should not require that a DR program must be dispatched frequently to achieve value."[4] SCE concludes that dispatching demand response in the energy market is not essential since "the energy value is de minimis relative to the capacity value." The Joint DR parties make the same point.[5]

[2] PG&E, p. 5.
[3] PG&E, pp. 3, 15. See, also, Joint DR Parties, p. 32.
[4] SCE, p. **
[5] Joint DR Parties, p. 5.

The Commission should keep in mind that the ability to provide local or flexible capacity value is unrelated to actual dispatch frequency.[6] TURN totally agrees that differences in customer opportunity costs should be reflected in prices. However, TURN strongly disagrees with the suggestion of PG&E and other parties that this be accomplished through program "flexibility," by allowing PG&E to administer "PG&E-operated DR that would offer customers and aggregators the ability to elect their availability ...."[7] Instead, the difference in opportunity costs should be reflected in bid prices submitted in a competitive process such as the DRAM, where lower prices would reflect lower opportunity costs based on the same availability rules, which should conform with product requirements specified by the CAISO. There is no need for "flexible availability." The overarching need is for demand response that qualifies for local or flexible capacity, as determined by CPUC and CAISO rules. If some customers and aggregated resources can be dispatched more frequently, the Demand Response provider can bid those resources at lower prices into the CAISO energy market and reap the benefits of energy payments, and presumably share those benefits with the customers who make up the resources.

Due to the huge reserve margin, reflecting the excess in system generation capacity, there is extremely little value in system generation capacity from demand response.[8] Thus, the focus on goals and program design should be to foster the ability and

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[6] Dispatch frequency may, however, impact the "reliability" of demand response, as discussed later.
[7] PG&E, p. 3.
[8] In other words, reducing generic system capacity by using DR will not avoid new power plants, since no new power plants for system needs are needed for at least the next decade, if not much longer. Any new power plants would be required only due to local needs (especially in the LA Basin) or flexible capacity needs (for renewable integration).

use of demand response to provide local or flexible capacity. Using demand response for local capacity will require addressing the 20-minute dispatch requirement for the CAISO; while using demand response for flexible capacity will require additional CAISO product definition, and will require dispatch of demand response resources during April and May afternoon hours that are not the typical system peak hours.

Metrics

TURN agrees with those parties that conclude that the key metric is actual MW of DR capacity, not necessarily the number of customers. TURN agrees with the ORA that ultimately the important metric is *reliable* MW of DR capacity.[9] However, until "reliability" is better defined there may be a benefit to increased and broader customer participation. Reliability of demand response reflects both the reliability of response due to a trigger or CAISO dispatch notice, and consistency in the amount of actual load reduction compared to the forecast or bid amount. But the "reliability" of a customer's response may vary with the number of hours dispatched, especially for certain large industrial customers.[10] Several parties emphasize the problem of "customer fatigue."[11] Moreover, since DR supply resources can bid into the CAISO market at any price, including at the bid cap, the "reliability" of response may not be known in reality until energy prices spike extremely high due to shortage or other imbalance conditions. By that time, it may be a bit too late to address supply conditions if it turns out that DR reliability is not as good as expected.

[9] ORA, p. 4.
[10] See, Interim Study, Appendix F, Figure F-6, p. 217.
[11] For example, SCE, p. 13.

Aggregating multiple customers to provide a DR resource may improve reliability through diversification, under the theory that the load drop from a large number of aggregated customers will be closer to forecast even if some customers cannot comply. Thus, it will be important to track both absolute load in a resource, as well as the number of customers and performance characteristics of each customer in a resource. TURN presumes that over time the DR providers, the utilities who purchase demand response products for RA value, and the CAISO will develop more familiarity with the performance characteristics and relevant metrics of DR resources.

2.2. Participation (Category 3)

The ORA recommends that the Utilities "create databases of customers within each sector with eligible end-uses that have large potential load reduction, and a propensity to participate for their own use and also make such information available to third party DR providers."[12] Several other parties agree with the Interim Report that use of existing meter data to promote targeted marketing could reduce customer acquisition costs and thus lower demand response costs, especially in the residential sector.[13]

TURN strongly agrees that the Utilities should make available customer consumption data to qualified contractors. Any such data must be provided in accordance with the Commission's adopted data privacy rules.[14] Such data can be shared with utility contractors or vendors who qualify as "covered entities," and must comply with the

[12] ORA, pp. 4, 5.
[13] For example, OhmConnect, pp. 4, 8.
[14] Any release of customer information requires either customer consent (See, D.13-09-025), or must be consistent with rules adopted pursuant to § 8380 and D.11-07-056. See, PG&E Electric Rule 27; SCE Electric Rule 25.

requirements for notice, disclosure and use of the confidential data.[15] TURN does not have information concerning the use of the data privacy rules by demand response providers to obtain customer consumption data without prior authorization. TURN recommends that if there is dispute or uncertainty concerning the applicability of data privacy rules for providing customer-specific consumption data to third parties selected through the DRAM, and what changes would have to be made in the DRAM contract, the Commission should hold a workshop to address these issues.[16]

2.3. Use of DRAM (Category 4)

TURN agrees with SCE and other parties that the Commission should allow for longer contract terms, and that the utilities should be authorized to shift more funding for DRAM if they find that DRAM offers are cost-effective compared to other programs.[17]

2.4. Baselines (Category 5 – Q7)

TURN agrees with SCE and other parties that the baseline used by the CAISO for settlement purposes may not be appropriate for measuring the amount of load reduction from weather-sensitive load, such as provided by traditional air conditioning load reduction programs.[18] TURN has not participated in the Baseline Analysis Working Group, and so cannot definitively recommend the best process for resolving this issue. TURN recommends that the CPUC and the CAISO hold a joint workshop if necessary.

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[15] TURN suggests that the question of whether third parties who win DRAM contracts qualify as "covered entities" should be addressed expeditiously via legal briefing, if there is any dispute concerning this issue.
[16] In a similar vein, the Joint DR Parties recommend a process to determine how much of the data collected for the Interim Report can be made available to parties consistent with Data Privacy Rules. See, Joint DR Parties, p. 13.
[17] SCE Responses, p. 17.
[18] SCE, p. 24; Joint DR Parties, p. 17-18.

2.5. Penalties for Non-Performance (Category 5 – Q9)

TURN recommends that the issue of performance penalties for both utility and third party supply resource demand response should be prioritized for a workshop and comments.

There seems to be general agreement that there should be standard performance penalties uniformly applicable to third party and utility resources. However, SCE suggests that non-performance penalties should take into account program design and incentive structure, and suggests that utility programs should be treated differently from third-party contracts, due to the utility obligation to enroll any willing and eligible customer.[19] SCE also raises the possibility that if ratepayers could be "exposed to additional costs or a penalty" due to non-performance, then those costs should be passed onto the Seller "in addition to the CAISO penalties."[20] TURN is unclear what those additional costs would be.

However, the CAISO explains that the RAAIM will "not separately enforce performance requirements" and the CAISO recommends that "contractual performance obligations should be maintained."[21]

TURN had assumed that the CAISO must offer obligations under PDR and RDRR and charges under the RAAIM would negate the need for additional performance penalties under the DRAM contract. TURN assumed that resources that did not

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[19] SCE Responses, p. 25-26. TURN does not necessarily agree with SCE that utility programs should be treated differently, but this is an issue worthy of additional workshop discussion.
[20] SCE Responses, p. 26.
[21] CAISO Responses, p. 9.

"perform" would eventually be terminated by the CAISO from participation in PDR or RDRR.

Based on the responses of the various parties, TURN suggests that this issue warrants clarification and greater exploration. Given a potential greater future reliance on DR, TURN believes that ensuring performance, and valuing resources that differ with respect to performance, is a critical long-term issue. TURN thus recommends that the Commission hold a workshop to 1) clarify the existing penalty structure at the CAISO; 2) clarify any "additional costs or penalties" that could be imposed on ratepayers as a result of DR non-performance in the CAISO market; 3) determine what, if any, additional penalties for non-performance must be adopted in the DRAM contract; and 4) address how any such penalties would apply equally to utility resources and third party resources.

3. Reply Concerning the Interim Report and Demand Response Value

Several parties, including TURN, rely on the Interim Report to promote certain policy positions. Thus, TURN highlights an important assumption of the Interim Report that must be kept in mind. The Interim Report identifies a potential contribution from demand response (aside from TOU rates) of about 4 GW by 2025, based on the average load reduction over the top 250 hours.[22] This apparently represents a contribution toward system generation capacity. However, all available information indicates that there will still be excess system capacity for at least the next ten to twenty years. In other words, while demand response may result in running fewer peaker plants, it will not displace building any new power plants based purely on system need.

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[22] The text of the study states "we use the top 250 hours of system load to define those hours of need," with a weighting based on the system net load (p. 33). See, also, Appendix C, p. 76-77. TURN is not clear on the exact implications of this method.

There are two corollaries to this result. First, the Commission has recently established a cost-effectiveness methodology for distributed energy resources that relies on long-term capacity value; however, when determining the reasonable tariff or market prices that ratepayers should pay for system demand response, the Commission must consider the fact that there is very little value to system capacity. In other words, demand response may help customers "manage their energy consumption and costs," but such private benefits should not be subsidized based on any general system benefits.

Second, as discussed previously, TURN recommends that the Commission and the CAISO work toward adopting changes that promote the use of demand response for local and flexible capacity needs, and appropriately value such capacities. It is hopeful to note that the Interim Report identifies a greater potential for demand response in the Los Angeles local reliability area,[23] since that is the primary area that has local capacity shortfalls.

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Respectfully submitted,

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[23] Interim Report, p. 72.